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Prevent and Treat Malaria During Pregnancy

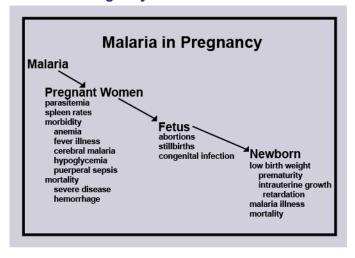
- Fetal loss, premature delivery, and death can be avoided through prompt disease recognition followed without delay by high-quality treatment of malaria.
- Pregnant women should sleep under an insecticide-treated bednet.
- Intermittent preventive treatment has a beneficial impact on maternal and infant health.

Each year more than 30 million African women living in malaria-endemic areas become pregnant and are at risk for *Plasmodium falciparum* infections. For these women, malaria is a threat both to themselves and to their babies, with up to 200,000 newborn deaths each year due to malaria in pregnancy.

Pregnant women with symptomatic malaria need treatment urgently

Case management of malaria illness is an essential component of malaria control during pregnancy. Treatment aims to completely cure the infection, as any level of parasitemia has consequences for mother and fetus.

In areas with a low level of resistance to sulfadoxine-pyrimethamine (SP), this drug is the recommended drug for treatment of uncomplicated malaria. Quinine is an alternative in areas where both chloroquine and SP are not effective, and it is the drug of choice for treatment of uncomplicated malaria in the first trimester of pregnancy. Drugs that should **not** be used during pregnancy are tetracycline, doxycycline, primaquine, and halofantrine.



Anemia can be prevented and needs to be managed

Anemia is one of the most important consequences of malaria infection during pregnancy. As part of routine antenatal care, every woman should receive iron/folate supplementation. All women should also be screened for anemia, and those with moderate to severe anemia should be managed according to national guidelines. In malaria-endemic areas pregnant women with severe anemia must be treated presumptively with an effective antimalarial, whether or not peripheral parasitemia is present or whether or not she has a history of fever.

Insecticide-treated bednets should be provided to all pregnant women

Malaria prevention during pregnancy includes the use of **insecticide-treated bednets (ITNs)**. Women should be encouraged to use ITNs as early in pregnancy as possible, throughout pregnancy, and in the postpartum period.

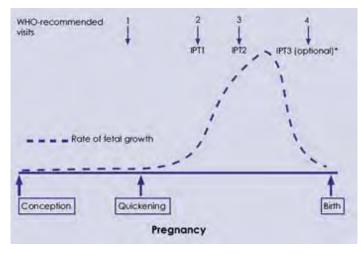
Global Health Technical Briefs

Pregnant women residing in high-transmission areas should take intermittent preventive treatment¹

Intermittent preventive treatment (IPT) involves the administration of two or three full, curative treatment doses of an efficacious, preferably single-dose, antimalarial drug (e.g., sulfadoxine-pyrimethamine) at predefined intervals during pregnancy, beginning in the second trimester after quickening². IPT can significantly reduce maternal anemia and low

Women should receive at least two doses of IPT, each at least one month apart. IPT can be administered under direct observation in the clinic or be given in the community.

WHO recommends a schedule of four antenatal care visits, with three visits after quickening. The delivery of IPT with each scheduled visit after quickening will help ensure that a high proportion of women receive at least two doses.



IPT can be given during regularly scheduled antenatal care visits.

*HIV infection diminishes a pregnant woman's ability to control *Plasmodium falciparum* infections. Women with HIV infection are thus more likely to have symptomatic infections and to have an increased risk for malaria-associated adverse birth outcomes. At least three doses of IPT are required to obtain maximum protection. In areas where HIV prevalence among pregnant women is >10%, a third dose of IPT should be administered at the last scheduled antenatal care visit.

Abuja Declaration Target

By the year 2005, at least **60%** of all pregnant women who are at risk of malaria, especially those in their first pregnancies, have access to intermittent preventive treatment.

Where to get more information: www.maqweb.org

References

birth weight.

USAID Technical Reference Material. http://www.childsurvival.com/documents/tms/tech/Malaria August 2004.doc.

WHO's Strategic Framework for Malaria Prevention and Control during Pregnancy in the Africa Region. http://mosqito.who.int/rbm/Attachment/20041004/malaria_pregnancy_str_framework.pdf

Bednets Reduce Malaria. Global Health Technical Brief. INFO Project. http://www.maqweb.org/techbriefs/tb17bednets.pdf

Illustration Credit (IPT):

Marchesini P, Crawley J. Reducing the burden of malaria in pregnancy. World Health Organization.

http://www.who.int/malaria/rbm/Attachment/20040713/MeraJan2003.pdf

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¹ Antenatal chemoprophylaxis with chloroquine has been shown to be of limited effectiveness. Therefore, chloroquine chemoprophylaxis no longer has a role in national policies for the control of malaria in pregnancy in the Africa region.

² The first perception of the baby's kicking and movement is referred to as quickening. Quickening usually occurs between 14—26 weeks of pregnancy.